POS 1000
with B49 / B69 / B79
M/B Installation Guide



482000G1
Dec 2004 V2.0

Safety

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions carefully.Save these instructions for future reference.
2. Follow all warnings and instructions marked on the product.
3. Do not use this product near water.
4. Do not place this product on an unstable cart, stand, or table.The product may fall, causing serious damage to the product.
5. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered.The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
6. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
7. Do not allow anything to rest on the power cord.Do not locate this product where persons will walk on the cord.
8. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

FCC

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1)This device may not cause harmful interference and

(2) This device must accept any interference received, including interference that may cause undesired operation.

CD-ROM Safety Warning

DANGER

INVISIBLE RADIATION WHEN OPEN.

AVOID EXPOSURE TO BEAM

Caution on Lithium Batteries

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer’s instructions.

Index

1. Accessory


WARRANTY CARD

MODEL No. | SERIAL No.
WARRANTY 1 YEAR | DATE OF PURCHASE
PURCHASER'S NAME
PURCHASER'S ADDRESS
DEALER'S NAME,ADDRESS,AND TEL. No.

Thank you for your purchase of our product. During the warranty period, your unit is fully warranted against defective materials under normal use or manufacturing faults. In case of defect, please contact your dealer.

This warranty card should be duly completed by the dealer on the date of purchase.

FLYTECH TECHNOLOGY CO., LTD

a. Warranty Card



b. Power Cable

c. Drivers Bank
d. Installation Guide

The following drivers in the folders of Driver Bank are necessary for driver installation.

B69 Mainboard

Folder/File	File Description
<CD>:\B69\B69.htm	B69 Driver list
<CD>:\Common\INTEL\Chipset	Chipset driver
<CD>:\Common\INTEL\i815VGA	VGA driver
<CD>:\Common\LAN_driver\R8139_810x	LAN driver
<CD>:\Common\Ac97_codec\ADI\AD1881A	Audio driver

B79 Mainboard

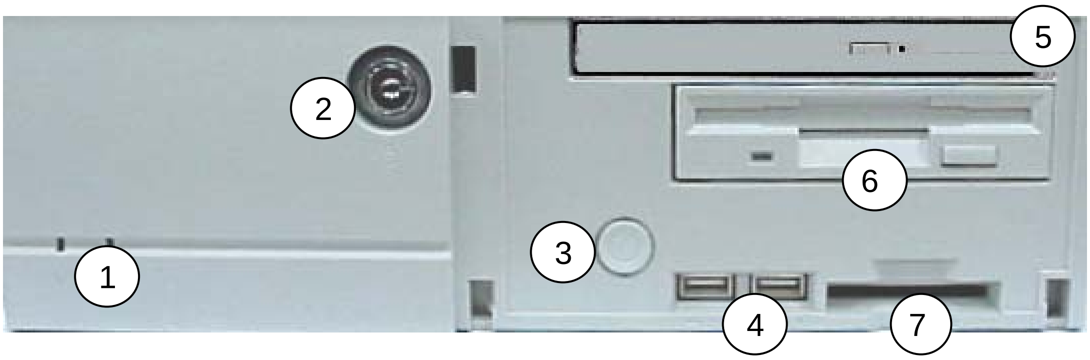
Folder/File	File Description
<CD>:\B79\B79.htm	B79 Driver list
<CD>:\Common\INTEL\Chipset	Chipset driver
<CD>:\Common\INTEL\i845VGA	VGA driver
<CD>:\Common\LAN_driver\R8139_810x	LAN driver
<CD>:\Common\Ac97_codec\ADI\AD1881A	Audio driver
<CD>:\Common\INTEL\USB20	USB2.0 driver

B49 Mainboard

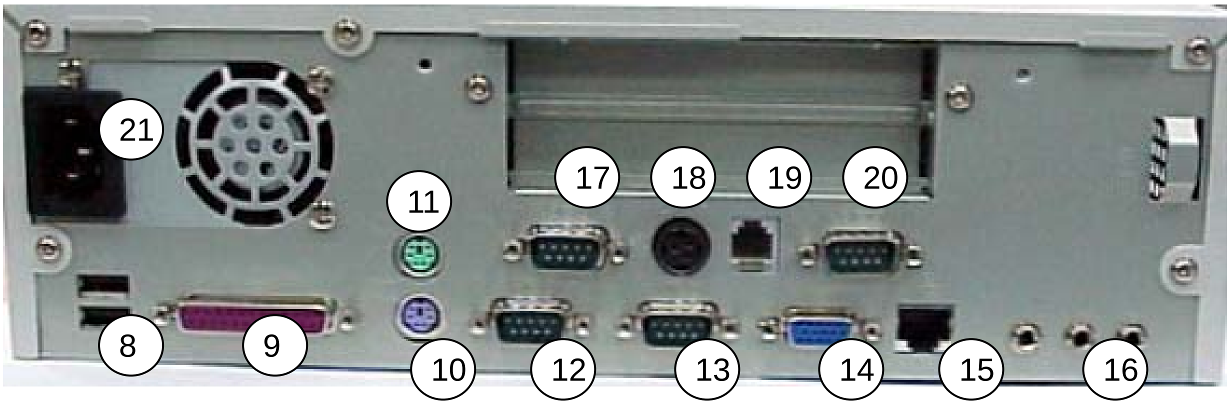
Folder/File	File Description
<CD>:\B49\B49.htm	B49 Driver list
<CD>:\Common\VIA\Chipset	Chipset driver
<CD>:\Common\VIA\VGA\CLE266	VGA driver
<CD>:\Common\LAN_driver\R8139_810x	LAN driver
<CD>:\Common\Ac97_codec\Realtek\ALC202A	Audio driver
<CD>:\Common\VIA\USB2.0	USB2.0 driver

2. I/O Function

2.1 POS 1000 Front View

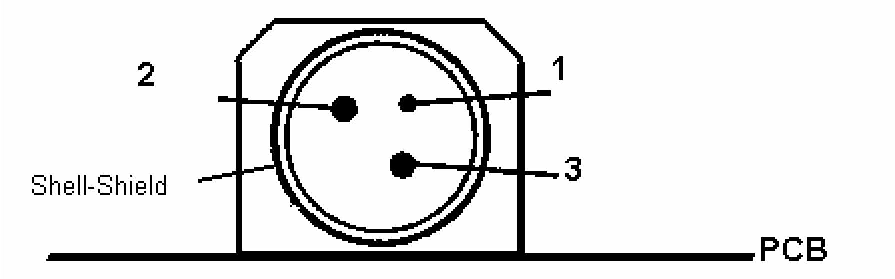


2.2 POS 1000 Rear View



#	Function	#	Function	#	Function
1	Power & HDD Indicator	8	USB 1& 2	15	LAN
2	Key Lock	9	LPT	16	Audio (MIC & Line In & Line Out)
3	Power Button	10	PS/2 Keyboard	17	COM4
4	USB 3 & 4	11	PS/2 Mouse	18	DC Output 24V/2.0A
5	Slim CD-ROM	12	COM2	19	Cash drawer
6	Floppy Disc Drive	13	COM1	20	COM3
7	Compact Flash	14	VGA	21	AC Inlet

Note: DC output 24 V Pin Assignment



Pin	Assignment
1	NC
2	+ 24V DC
3	Ground

3. Specification

3.1 B69 & B79

Model	1691	1791
MB	B69 all-in-one Mainboard	B79 all-in-one Mainboard
Core logic	Intel 82815E B-STEP GMCH & 82801BA ICH2	Intel 82845GV GMCH & 820801DB ICH4
CPU	Intel socket 370 CPU Celeron /PIII FC-PGA/FC-PGA2	Intel socket 478 CPU Celeron /P4 400/533 FSB with Hyper Threading Technology support
System memory	2x 168pin DIMM sockets support 100/133 MHz SDRAM up to 512MB	2 x DDR DIMM 200/266/333 up to 2GB
BIOS	Award PnP BIOS	
Video display	Built-in GMCH Maximum resolution is up to 1600x1200 pixels.	Built-in GMCH Maximum resolution is up to 1920x1080 pixels.
Video memory	The internal graphics device use share system main memory structure and supports Intel Dynamic Video Memory Technology (D.V.M.T.). Intel D.V.M.T. dynamically responds to application requirements by allocating the proper amount of display and texturing memory taken from system memory by driver control.	
	1MB On-Chip Frame Buffer Size for legacy OS.	For legacy OS, user control the 1MB/8MB On-Chip Frame Buffer Size by BIOS SETUP.
I/O controller	W83627HF x 1, W83697 HF x1	
LAN controller	Realtek RTL8100BL 10/100Mb fast Ethernet controller Support Wake-On-LAN & boot from LAN	
IDE controller	Built-in core logic support UDMA 33/66/100Mhz	
HDD connector	Primary: 1x 40-pin 2.54 pitch Secondary: 1x 44pin 2.0 pitch, 1x Compact Flash socket	
FDD connector	1x 34-pin 2.54 pitch	
Audio controller	AC’97 AD1881 (2ch)	
Expansion Slot	2x PCI slot	
M/B dimension	232x313mm	

I/O Port	Rear Panel: 1 x PS2 keyboard port 1 x PS2 Mouse port 2 x DB-9M RS-232 serial ports (COM1/COM2, pin1 & 9 with 5V/12V power select) 1 x DB25F Parallel port 1 x DB15F VGA port 1 x RJ45 LAN port 2 x USB ports 1 x Line In,1 x Line out,1 x MIC POS I/O port 1 x RJ11 cash drawer port 1 x 24V POS printer power port (max. 24V/2A) 2 x DB-9M RS-232 serial ports (COM3/COM4, pin1 & pin9 with 5V/12V power selectable) Front Panel: 1x Compact Flash socket 2x USB ports
Storage Device	1 x 3.5" FDD drive 1 x 3.5" HDD drive bay
	Optional: 1 x slim CD-ROM /CD-RW/DVD-ROM drive bay 1 x 3.5" HDD drive bay
Power Supply	FT818000 internal ATX 180W
System Dimension	300(w) x 335 (d) x 90 (h) mm without cable manage cover
Thermal	CPU Cooler x1 Support hardware monitor for fan speed control and software throttling
Customer Display	Optional: LED / VFD/ Graphic Customer Display Pole height (9 /22 cm)
EMC	FCC/CE Class B CE mark: EN55022 / EN61000 -3-2 2000 / EN61000-3-3 / EN55024
Safety	LVD: EN60950 2000
Case Color	Computer white/ Silver black
OS Support	Win98/2000/XP/NT 4.0,Linux

3.2 B49

Model	1491
M/B	B49
Core Logic	VIA CLE266 (VT8623CE) North Bridge VIA VT8235CD South Bridge
CPU	VIA Eden / C3 EBGA Processors Support for VIA C3 EBGA processors 133/100/66MHZ CPU Front Side BUS (FSB) C3 EBGA 733 / 800 / 1.0G / 1.2G or High (Optional) C3 EBGA 800 Standard to Use
System Memory	2 x DDR266/200 DIMM up to 2Gbyte memory size
BIOS	Award PnP BIOS
Video Display	Integrated ProSavage8 2D/3D Video Accelerator MPEG-2 video textures 2D/3D resolutions up to 1400 x 1050 x 32
Video Memory	16/32/64 MB frame buffer using system memory
I/O Controller	Winbond 83697HFx1, 83697HFx1, 83697UFx1
LAN controller	Realtek RT8100BL 10/100Mb fast Ethernet controller Support Wake-On-LAN and boot from LAN
TV – Out	PAL / NTSC multi system support VIA VT1622A TV Out (TV Encoder) 1 x 8pin-header support RCA /S-Video interface (Optional)
HDD connector	Primary: 1x 40-pin 2.54 pitch Secondary: 1x 44pin 2.0 pitch, 1x Compact Flash socket
FDD connector	1x 34-pin 2.54 pitch
USB Controller	VT8235 Integrated support USB2.0
Audio controller	AC'97 Realtek ALC202A (2ch)
Expansion Slot	2 x PCI slot
M/B dimension	232 mm (W) x 314 mm (D)
Storage Device	1 x 3.5" FDD drive 1 x 3.5" HDD drive bay
	Optional: 1 x slim CD-ROM /CD-RW/DVD-ROM drive bay 1 x 3.5" HDD drive bay
Power supply	FT818000 internal ATX 180W
System dimension	300(w) x 335 (d) x 90 (h) mm without cable manage cover
Thermal	CPU Cooler x1 Support hardware monitor for fan speed control and software throttling
Customer Display	Optional: LED / VFD/ Graphic Customer Display Pole height (9 /22 cm)

EMI	CE Class B FCC Class B
Safety	LVD: EN60950 2000
I/O port	Rear Panel: 2 x USB 2.0 ports 1 x DB-25F Parallel port 1 x 1*6Pin Double PS2 Keyboard / Mouse port 2 x DB-9M RS-232 Serial port 1 x DB-15F VGA port 1 x RJ-45 LAN port 1 x Audio jacks: line-out 1 x Line In 1 x Line out 1 x MIC POS I/O port 1 x RJ11 cash drawer port 1 x 24V POS printer power port (max. 24V/2A) 2 x DB-9M RS-232 serial ports (COM3/COM4, pin1 & pin9 with 5V/12V power selectable) Option1: 1 x 2nd printer port on slot bracket Option2: 2 x USB 2.0 ports (for slot user, support pin header) Front Panel: 2 x USB 2.0 ports 1 x compact flash
Case Color	Computer white/ Silver black
OS Support	Windows 9x/ME/NT 4.0/2000/XP Linux

3.3 System Memory Combination

3.3.1 POS 1000 B69 M/B

RAM Size / Slot	128MB		256MB			512MB		
DIMM1	X	128	128	256	X	256	512	X
DIMM2	128	X	128	X	256	256	X	512

3.3.2 POS 1000 B79 M/B

RAM Size / Slot	128MB		256MB			512MB			1024MB			2048MB
DIMM1	X	128	128	256	X	256	512	X	512	1024	X	1024
DIMM2	128	X	128	X	256	256	X	512	512	X	1024	1024

Note:

1. Optimal Combination

CPU system bus	400	533
DIMM	DDR 266	DDR 333

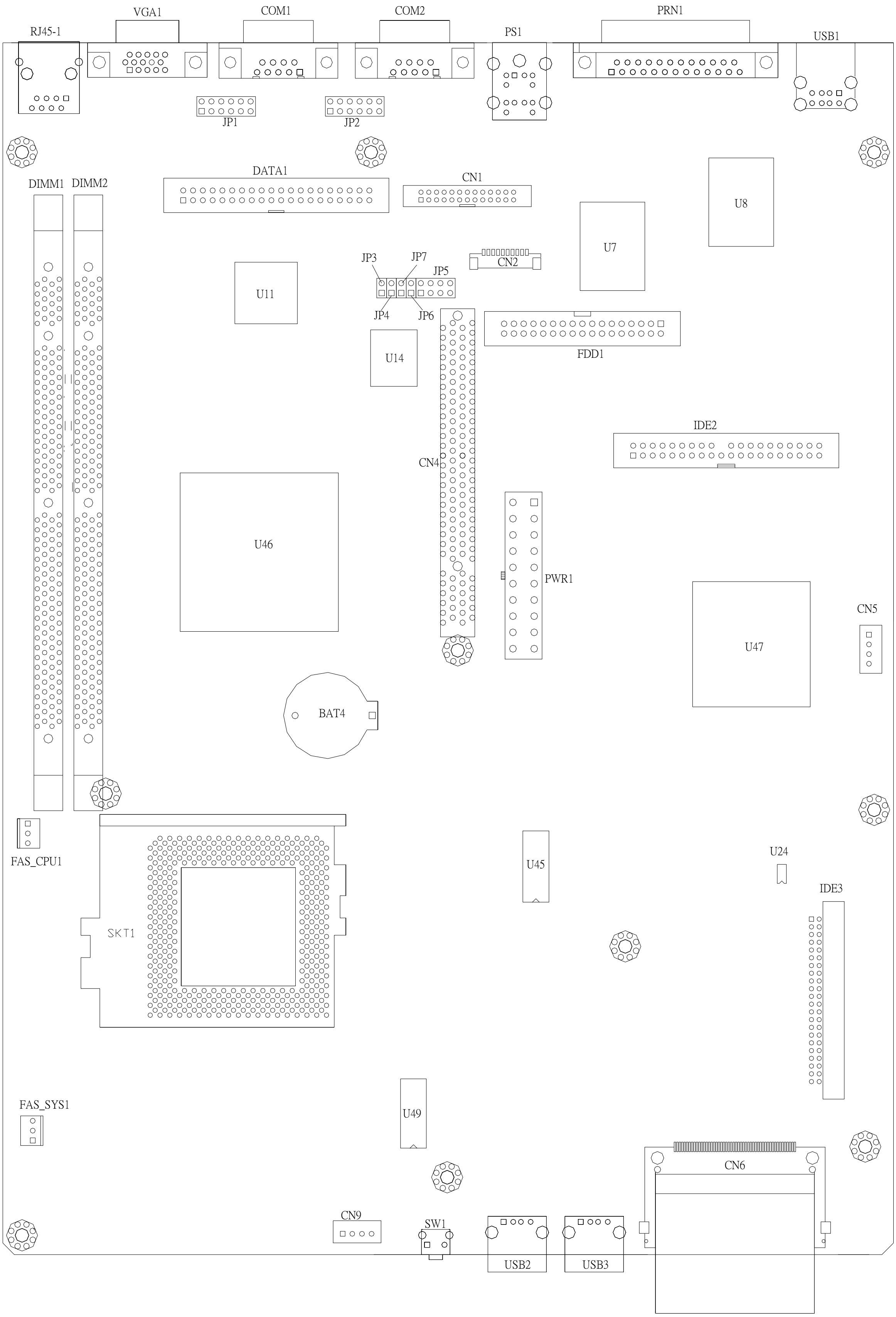
2. In B79 memory 2048MB combination, if you want to use double stack memory that your DIMM1 and DIMM2 all should be double stack memory.

3.3.3 POS 1000 B49 M/B

RAM Size / Slot	128MB		256MB			512MB			1024MB			2048MB
DIMM1	X	128	128	256	X	256	512	X	512	1024	X	1024
DIMM2	128	X	128	X	256	256	X	512	512	X	1024	1024

4. Jumper Setting

4.1 B69 M/B



4.1.1 COM 1 Power Selection

* Default Setting

Pin	Function	JP1 (SHORT)
1	*DCD#	1-2
	VCC	3-4
	+12V	5-6
9	*RI#	7-8
	VCC	9-10
	+12V	11-12

4.1.2 COM 2 Power Selection

Pin	Function	JP2 (SHORT)
1	*DCD#	1-2
	VCC	3-4
	+12V	5-6
9	*RI#	7-8
	VCC	9-10
	+12V	11-12

4.1.3 Power Mode Selection

Function	JP3
*ATX Power	OPEN
AT Power	SHORT

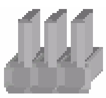
4.1.4 CMOS Operation mode

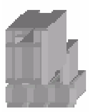
Function	JP6
*CMOS Normal	OPEN
CMOS Reset	SHORT

4.1.5 Compact Flash Master/Slave Setting

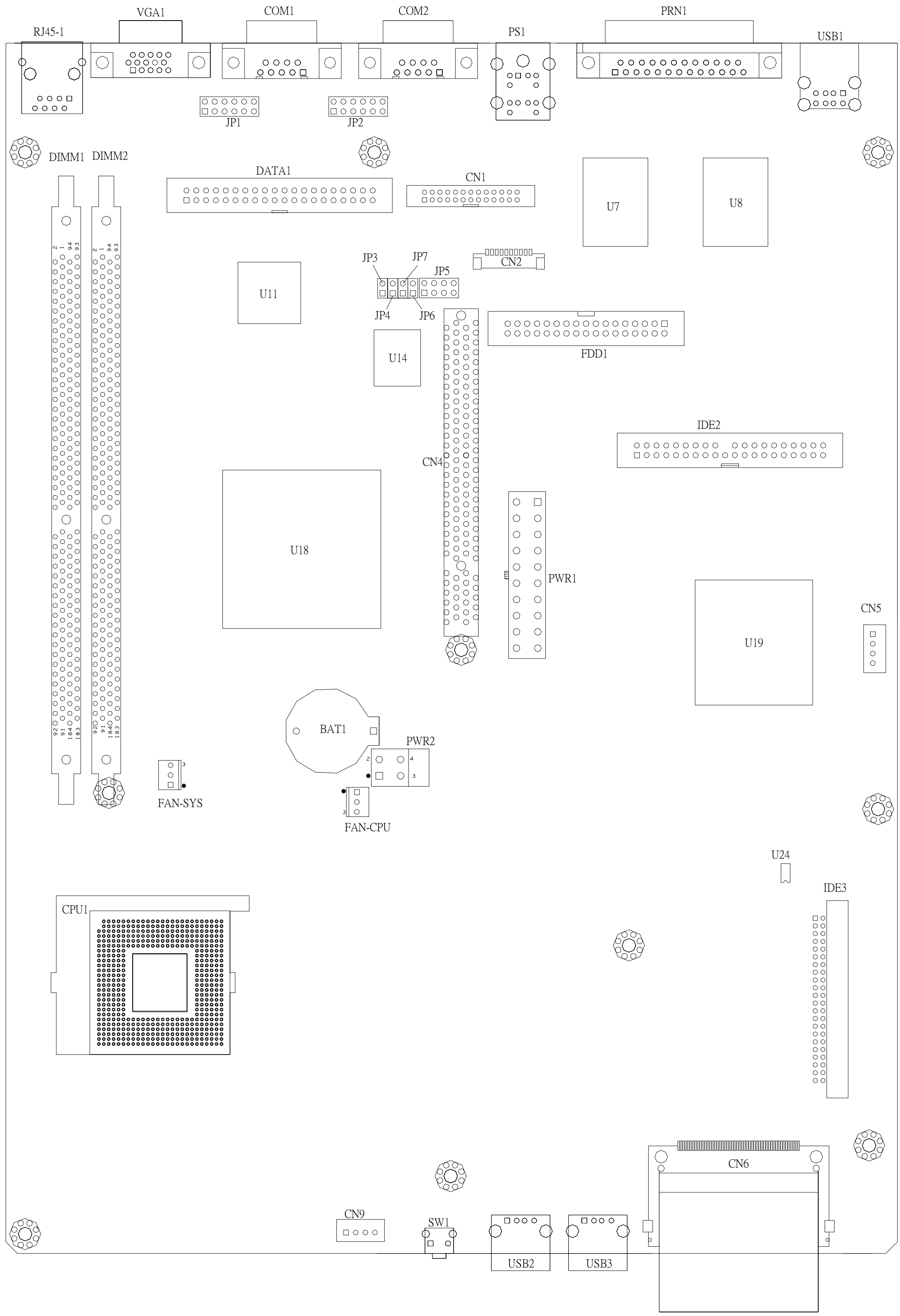
Function	JP7
*Master	OPEN
Slave	SHORT

Note:

OPEN 

SHORT 

4.2 B79 M/B


VGA1
COM1
COM2
PRN1
RJ45-1
PS1
USB1
JP1
JP2
DIMM1
DIMM2
DATA1
CN1
U7
U8
JP3
JP7
JP5
CN2
U11
JP4
JP6
FDD1
U14
IDE2
CN4
U18
PWR1
CN5
U19
BAT1
PWR2
FAN-SYS
FAN-CPU
U24
IDE3
CPU1
CN6
CN9
SW1
USB2
USB3

4.2.1 COM 1 Power Selection

* Default Setting

Pin	Function	JP1 (SHORT)
1	*DCD#	1-2
	VCC	3-4
	+12V	5-6
9	*RI#	7-8
	VCC	9-10
	+12V	11-12

4.2.2 COM 2 Power Selection

Pin	Function	JP2 (SHORT)
1	*DCD#	1-2
	VCC	3-4
	+12V	5-6
9	*RI#	7-8
	VCC	9-10
	+12V	11-12

4.2.3 Power Mode Selection

Function	JP3
*ATX Power	OPEN
AT Power	SHORT

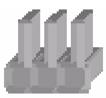
4.2.4 CMOS Operation mode

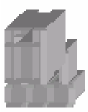
Function	JP6
*CMOS Normal	OPEN
CMOS Reset	SHORT

4.2.5 Compact Flash Master/Slave Setting

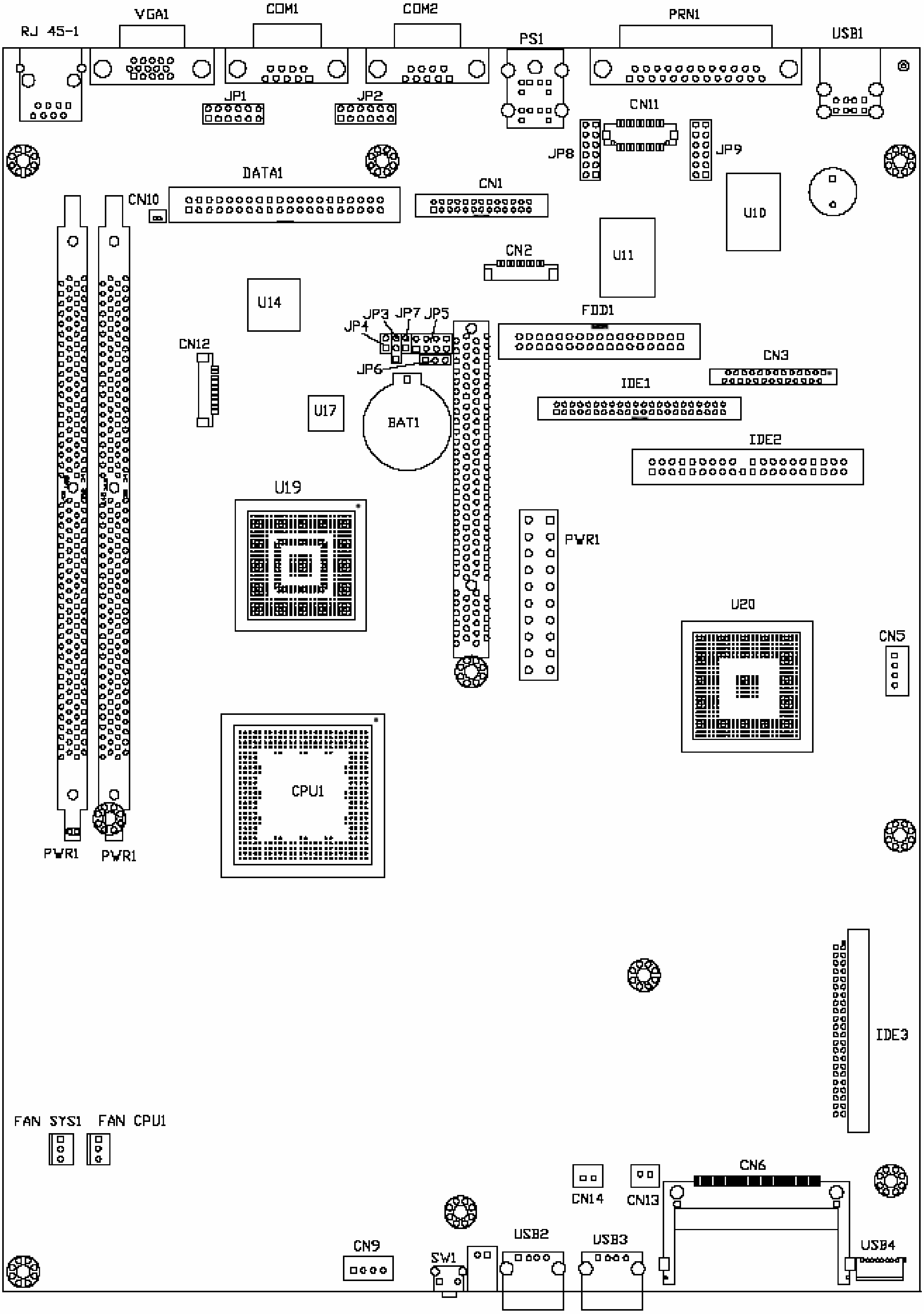
Function	JP7
*Master	OPEN
Slave	SHORT

Note:

OPEN 

SHORT 

4.3 B49 M/B


RJ 45-1
VGA1
COM1
COM2
PS1
PRN1
USB1
JP1
JP2
CN11
JP8
JP9
DATA1
CN10
CN1
U10
CN2
U11
U14
JP3 JP7 JP5
JP4
FDD1
CN12
JP6
CN3
IDE1
U17
BAT1
IDE2
U19
PWR1
U20
CN5
CPU1
PWR1
PWR1
IDE3
FAN SYS1
FAN CPU1
CN6
CN14
CN13
CN9
SW1
USB2
USB3
USB4

4.3.1 COM1 Power Select

* Default Setting

Pin	Function	JP1(SHORT)
1	*DCD#	1-2
	+5V	3-4
	+12V	5-6
9	*RI#	7-8
	+5V	9-10
	+12V	11-12

4.3.2 COM2 Power Select

Pin	Function	JP2 (SHORT)
1	*DCD#	1-2
	+5V	3-4
	+12V	5-6
9	*RI#	7-8
	+5V	9-10
	+12V	11-12

4.3.3 Power Mode Setting

Function	JP3 (SHORT)
* ATX Power	1-2
AT Power	2-3

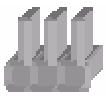
4.3.4 CMOS Clear Selection

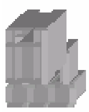
Function	JP6 (SHORT)
* Normal	1-2
Clear	2-3

4.3.5 Compact Flash Master/Slave Setting

Function	JP7
* Master	SHORT
Slave	OPEN

Note:

OPEN 

SHORT 

4.4 POS I/O Board Jumper Setting

4.4.1 COM 3 Power Selection

* Default Setting

Pin	Function	JP4 (SHORT)
1	*DCD#	1-2
	VCC	3-4
	+12V	5-6
9	*RI#	7-8
	VCC	9-10
	+12V	11-12

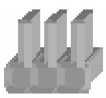
4.4.2 COM 4 Power Selection

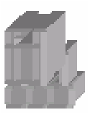
Pin	Function	JP3 (SHORT)
1	*DCD#	1-2
	VCC	3-4
	+12V	5-6
9	*RI#	7-8
	VCC	9-10
	+12V	11-12

4.4.3 Cash Drawer Power Selection

Function	JP2 (SHORT)
24V	1-2
*12V	2-3

Note:

OPEN 

SHORT 

5. Driver Installation

5.1 B69 M/B

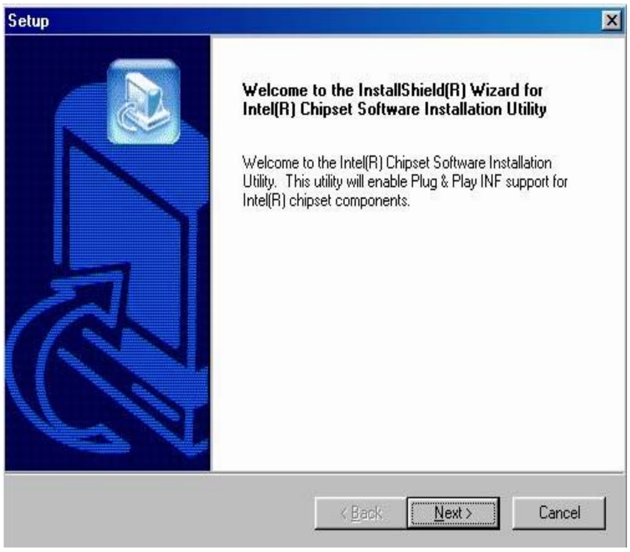
The following procedures are for Windows 98SE, other platforms are similar.

5.1.1 Chipset Driver Installation

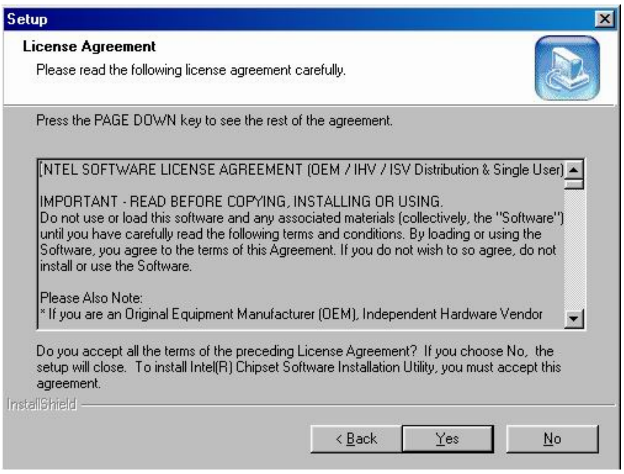
Driver path: <CD>:\Common\INTEL\Chipset



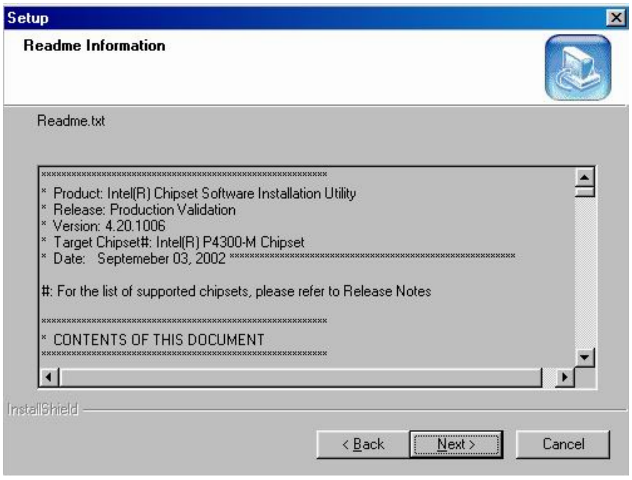
a. Click "Intel_Chipset_4_20_1006" on the My Computer window.



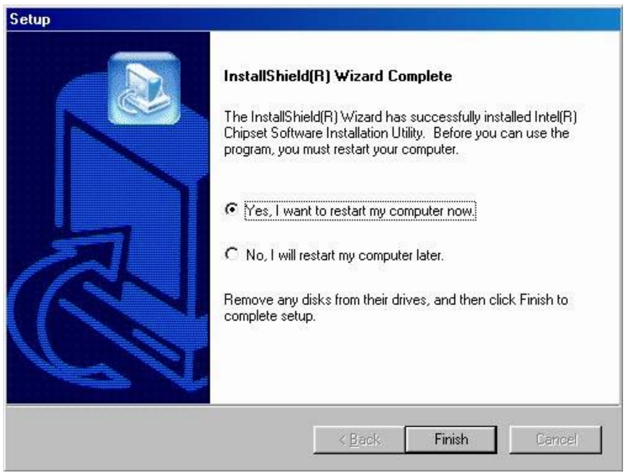
b. Click "Next" button on the Welcome window.



c. Click "Next" button on the License Agreement window.



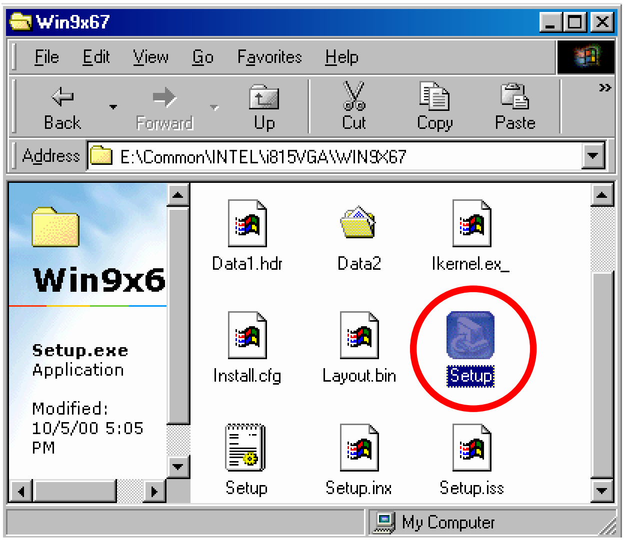
d. Click "Next" button on the Read me Information window.



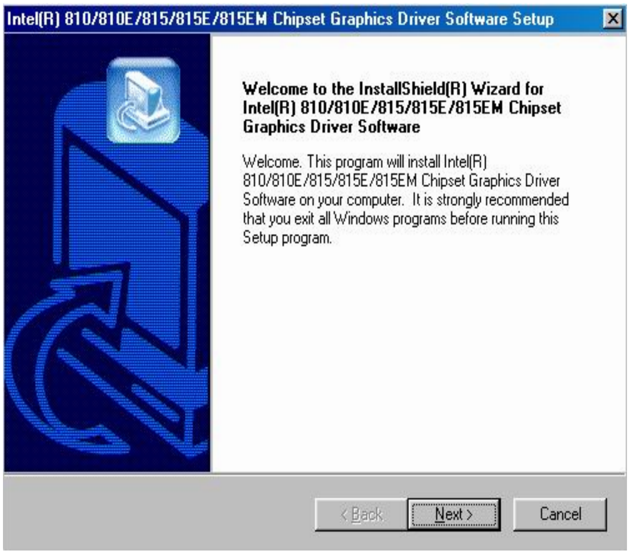
e. Click "Finish" and restart your system.

5.1.2 VGA Driver Installation

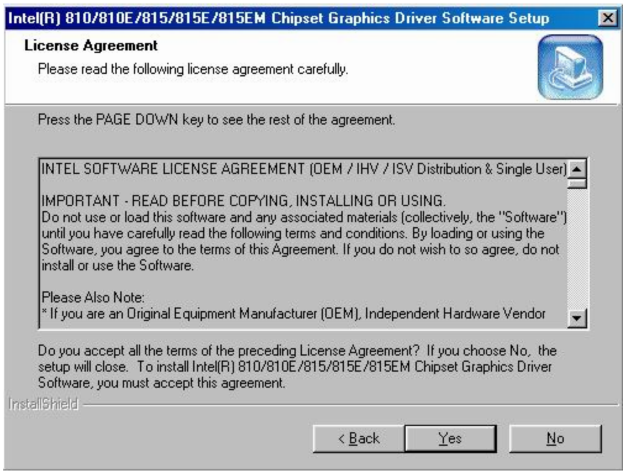
Driver path: <CD>:\Common\INTEL\i815VGA



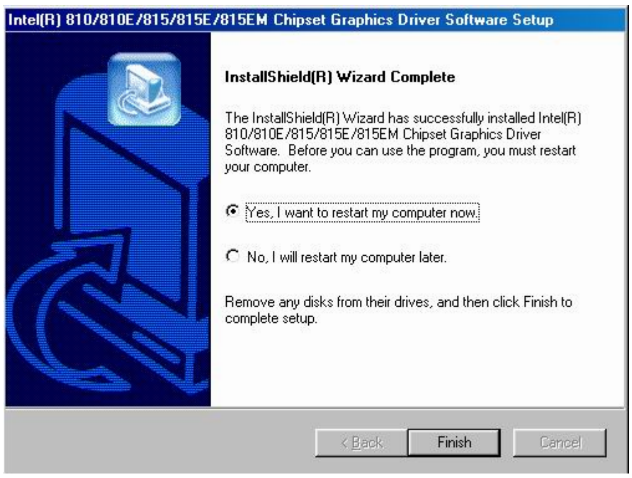
a. Click "Setup" on the My Computer window.



b. Click "Next" button on the Welcome window.



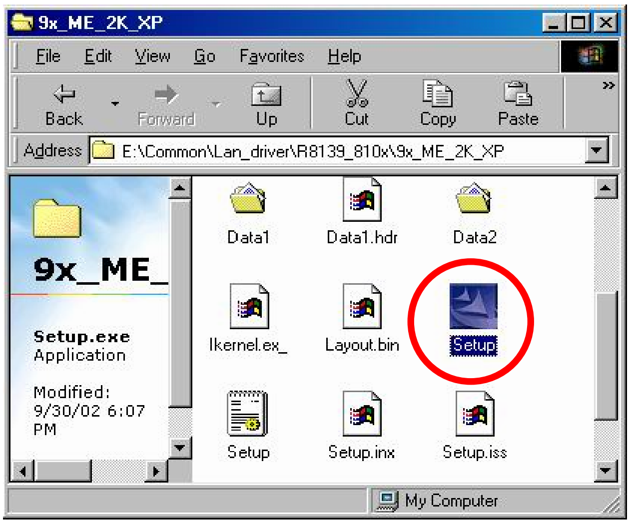
c. Click "Next" button on the License Agreement window.



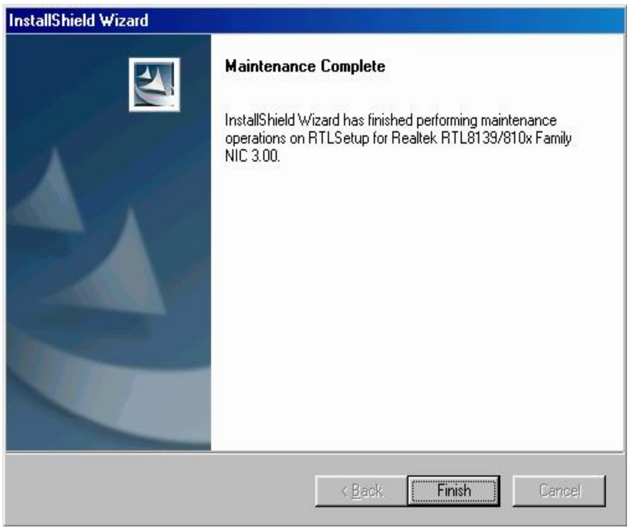
d. Click "Finish" and restart your system.

5.1.3 LAN Driver Installation

Driver path: <CD>:\Common\Lan_driver\R8139_810x)



a. Click "Setup" on the My computer windows.



b. Click "Finish" button on the Maintenance complete window.



c. Click "OK" to restart the system.

5.1.4 Audio Driver Installation

Driver path: <CD>:\Common\Ac97_codec\ADI\AD1881A



a. Click " Next" button on the Add New Hardware Wizard window.



b. Click " Next" on the Add New Hardware Wizard window.



c. Browse the driver path and Click "Next" button.



d. Click " Next" button on the Add New Hardware Wizard window.



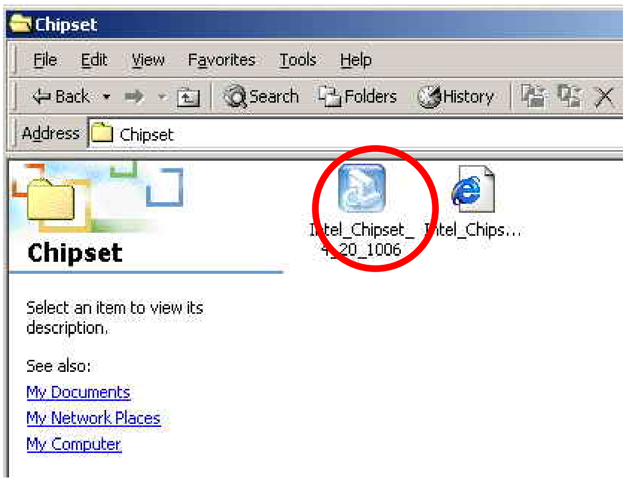
e. Click " Finish" button on the Add New Hardware Wizard window.

5.2 B79 M/B

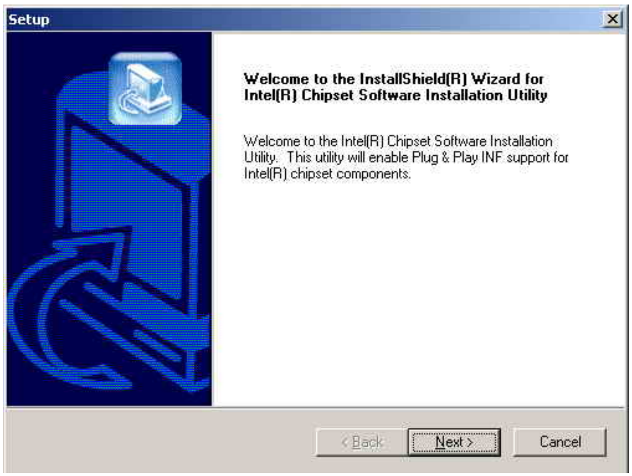
The following procedures are for Windows 2000, other platforms are similar.

5.2.1 Chipset Driver Installation

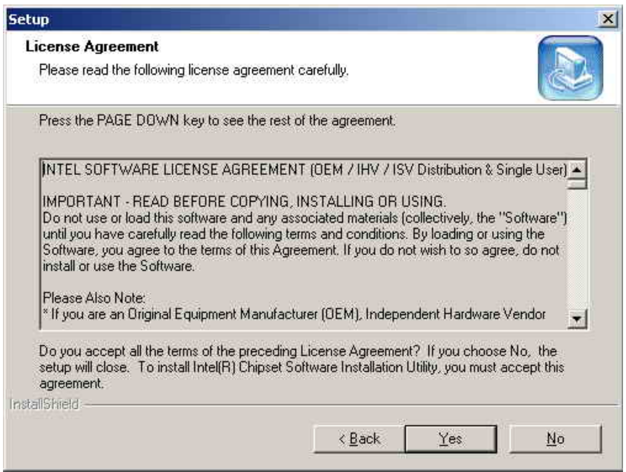
Driver path: <CD>:\Common\INTEL\Chipset



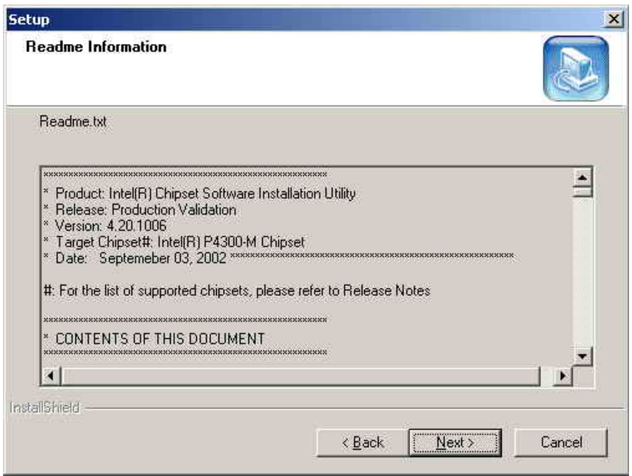
a. Click ” Intel_Chipset_4_20_1006” on the My computer windows.



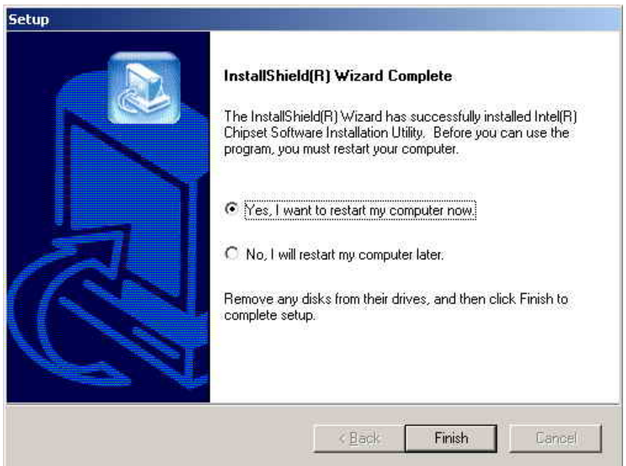
b. Click “Next” button on the Setup window.



c. Click "Yes" button on the License Agreement window.



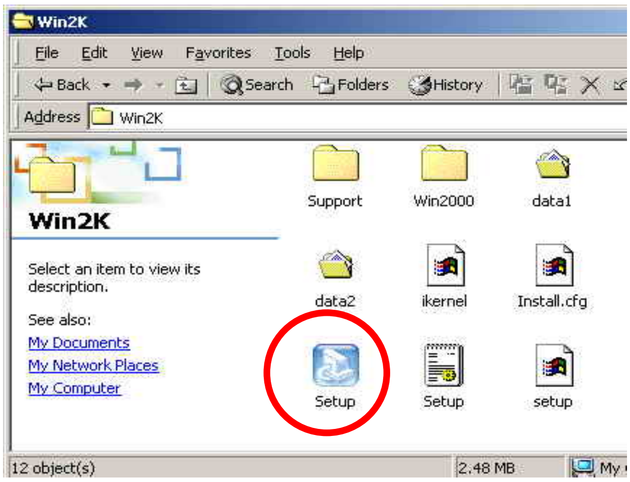
d. Click "Next" button on the ReadME window.



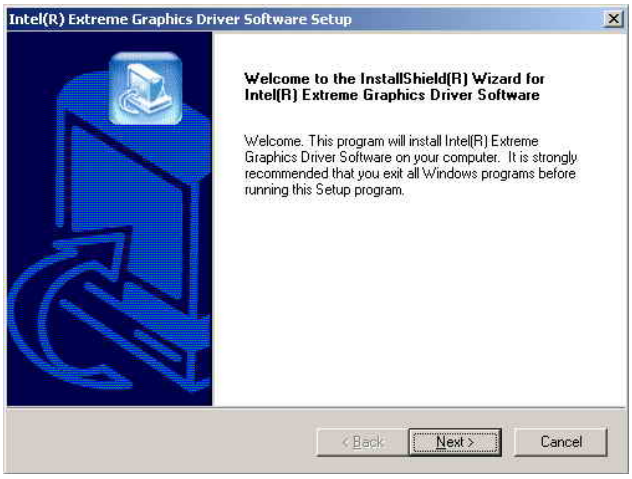
e. Click ”Finish” to restart the system.

5.2.2 VGA Driver Installation

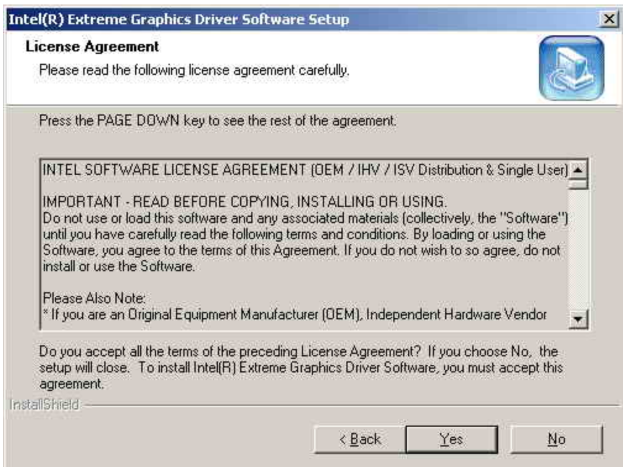
Driver path: <CD>:\Common\INTEL\i845VGA



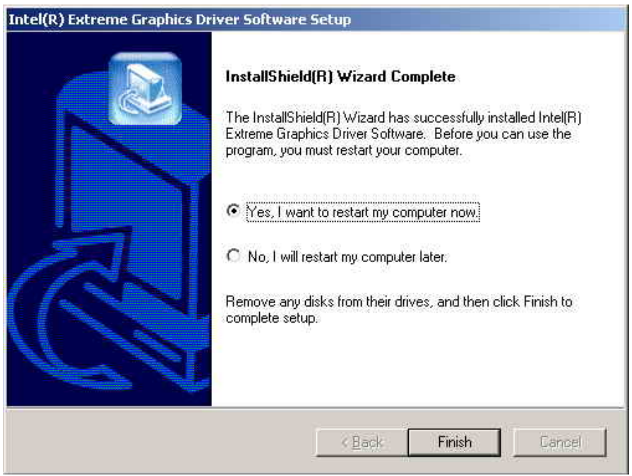
a. Click " Setup" on the My computer windows.



b. Click "Next" button on the Welcome window.



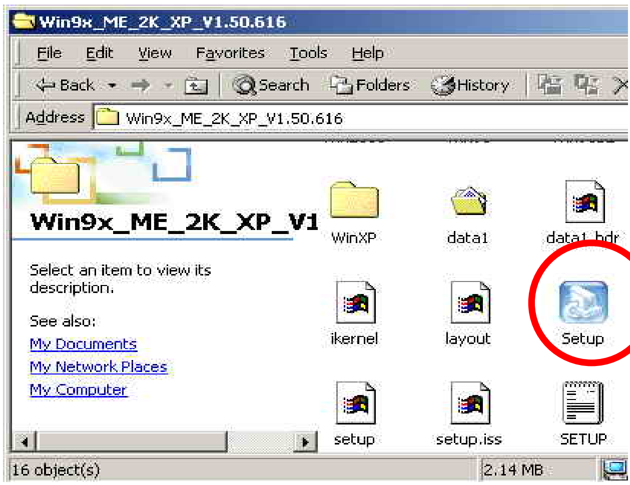
c. Click "Yes" button on the License Agreement window.



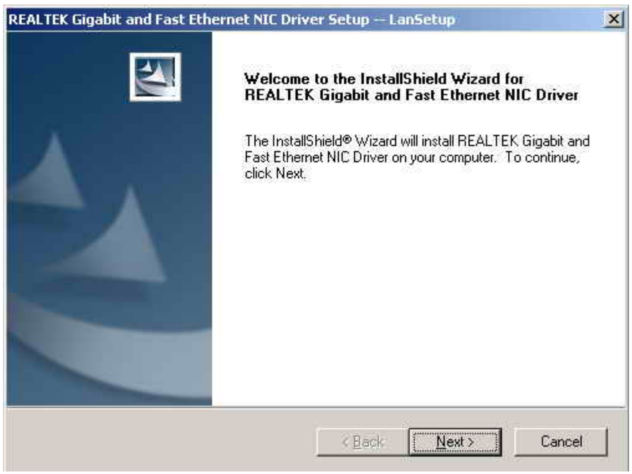
d. Click "Finish" to restart the system.

5.2.3 LAN Driver Installation

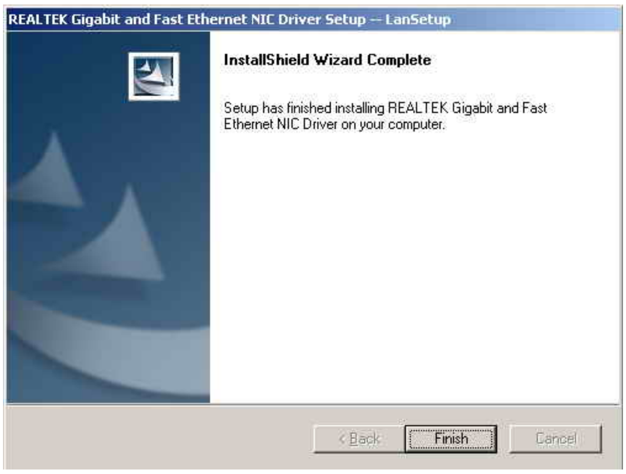
Driver path: <CD>:\Common\LAN_driver\R8139_810x)



a. Click "Setup" on the My computer window.



b. Click "Next" button on the Welcome window.



c. Click "Finish" on the LanSetup window.

5.2.4 Audio Driver Installation

Driver path: <CD>:\Common\Ac97_codec\ADI\AD1881A



a. Click " Next" button on the Add New Hardware Wizard window.



b. Click " Next" on the Add New Hardware Wizard window.



c. Browse the driver path and Click "Next" button.



d. Click " Next" button on the Add New Hardware Wizard window.



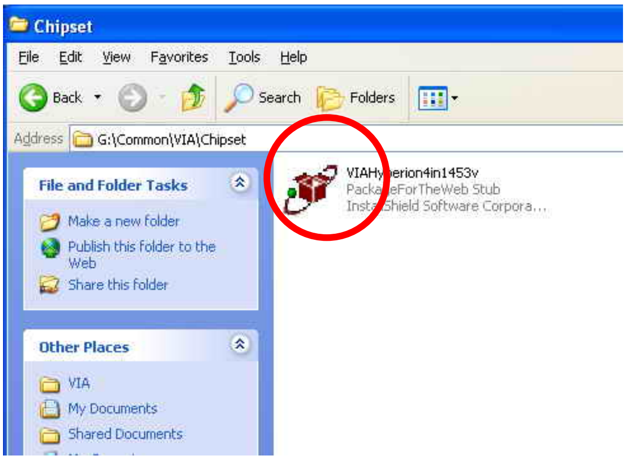
e. Click " Finish" button on the Add New Hardware Wizard window.

5.3 B49 M/B

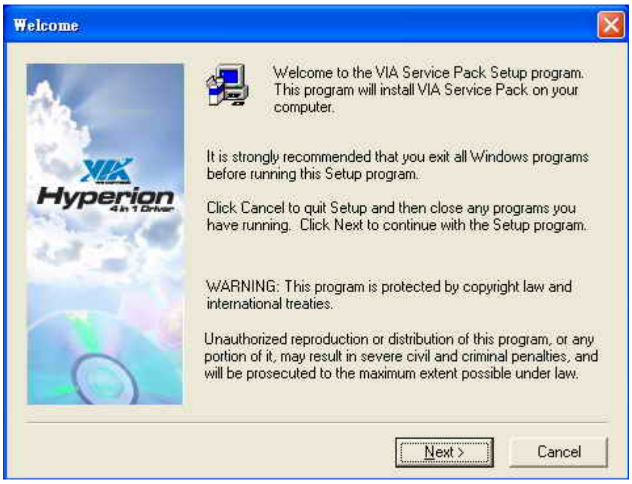
The following procedures are for Windows XP, other platforms are similar.

5.3.1 Chipset Driver Installation

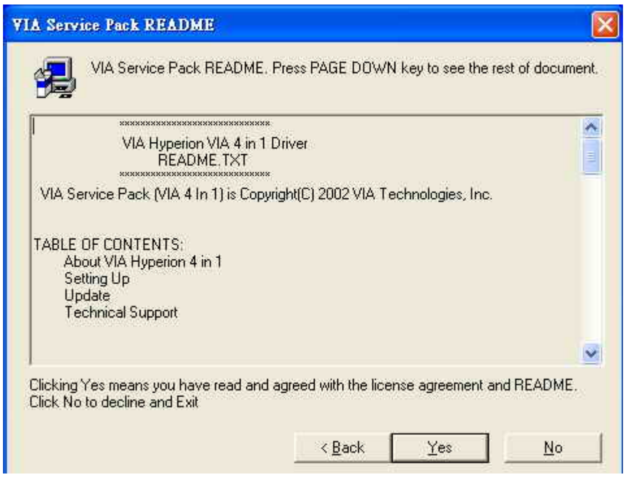
Driver path: <CD>:\Common\VIA\Chipset)



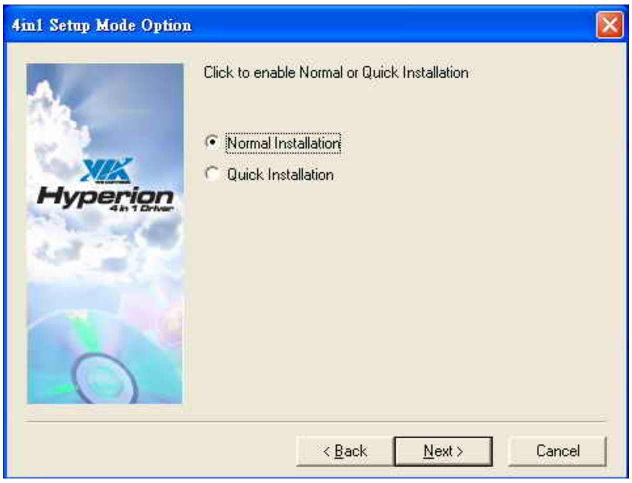
a. Click “VIAHyperion4in1453v” on the My computer window.



b. Click “Next” button on the Welcome window.



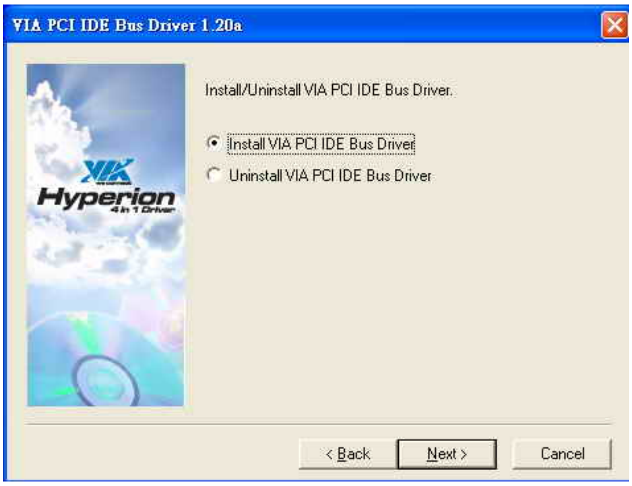
c. Click “Yes” button on the ReadME window.



d. Click “Next” button on the 4in1 Setup Mode Option window.



e. Click “Next” button on the Setup Component window.



f. Click “Next” button on the VIA PCI IDE Bus Driver window.



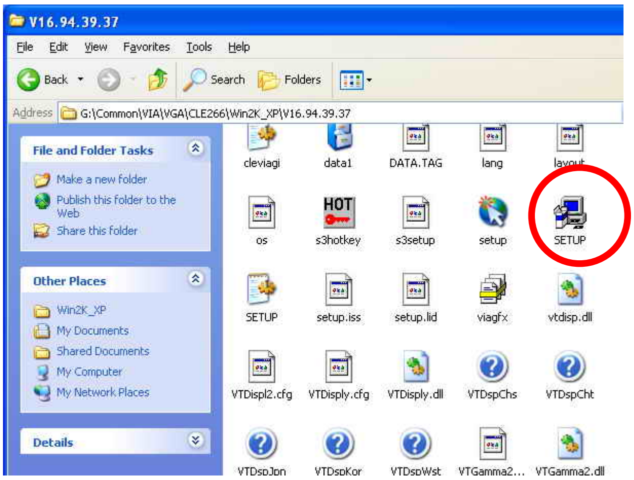
g. Click “Next” button on the VIA_GART AGP Driver window.



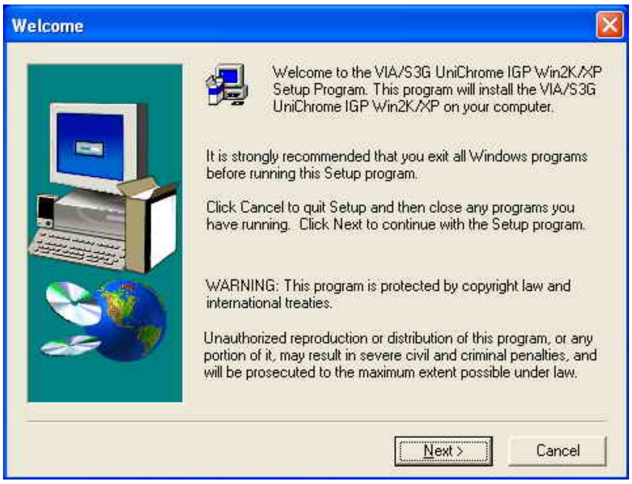
h. Click “OK” button to restart the system.

5.3.2 VGA Driver installation

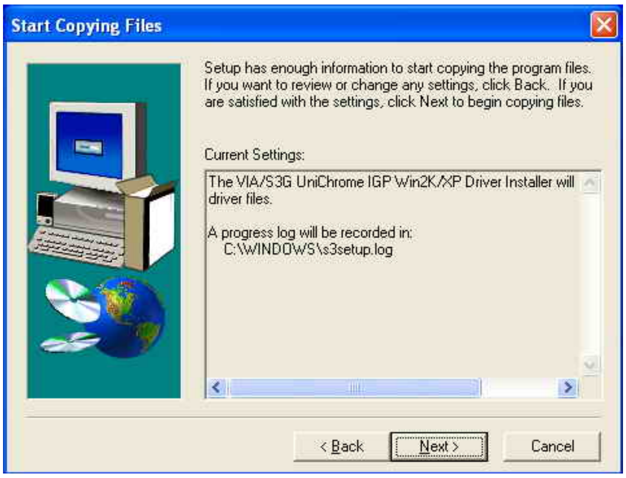
Driver path: <CD>:\Common\VIA\VGA\CLE266)



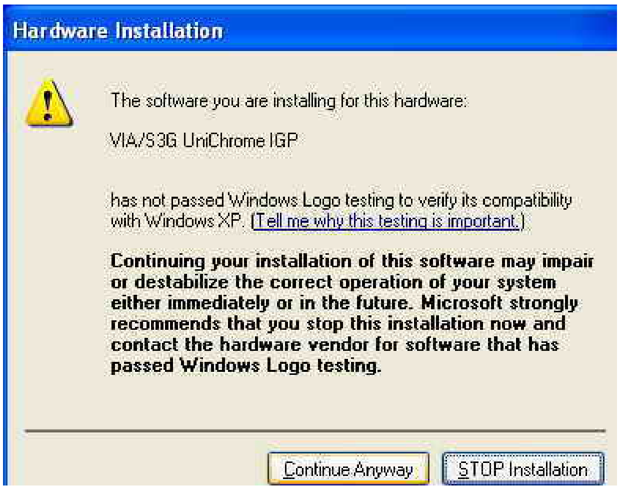
a. Click “Setup” on the My computer window.



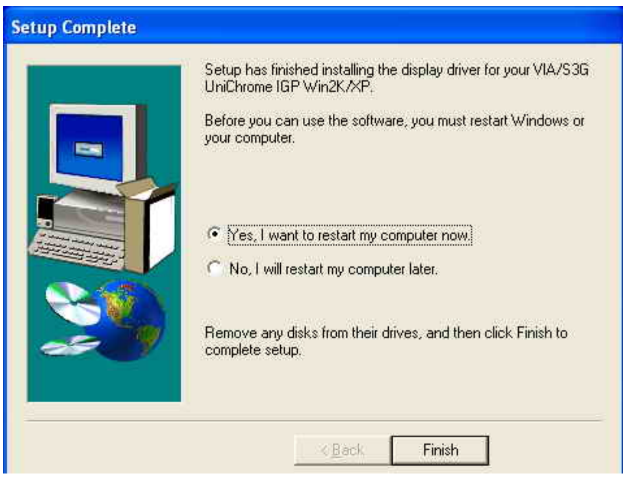
b. Click “Next” button on the Welcome window.



c. Click “Next” button on the Start Copying Files window.



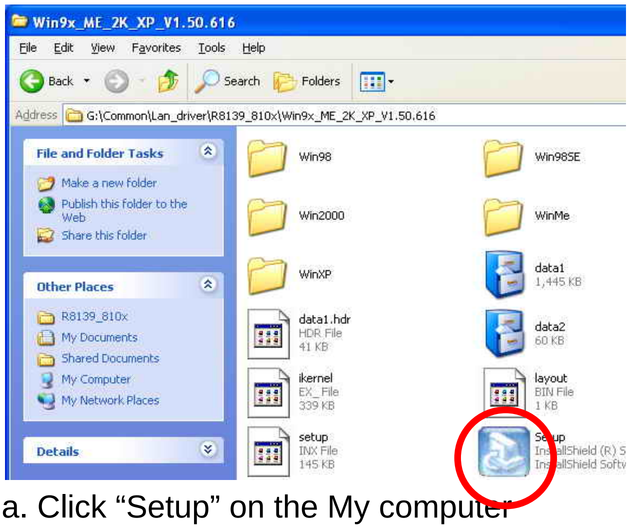
d. Click “Continue Anyway” button on the Hardware Installation window.



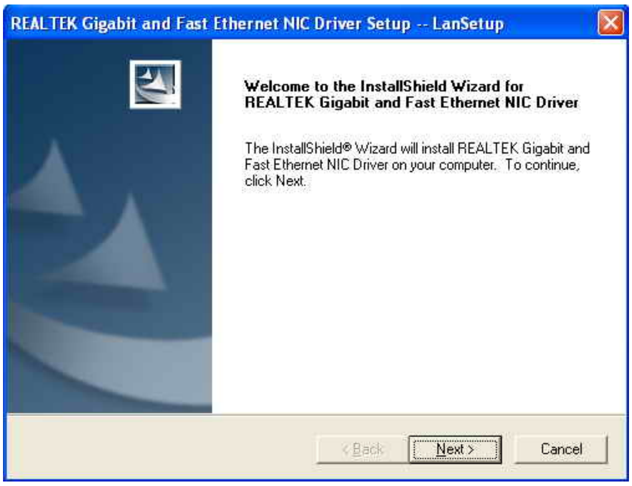
e. Click “Finish” button to restart the system.

5.3.3 LAN Driver Installation

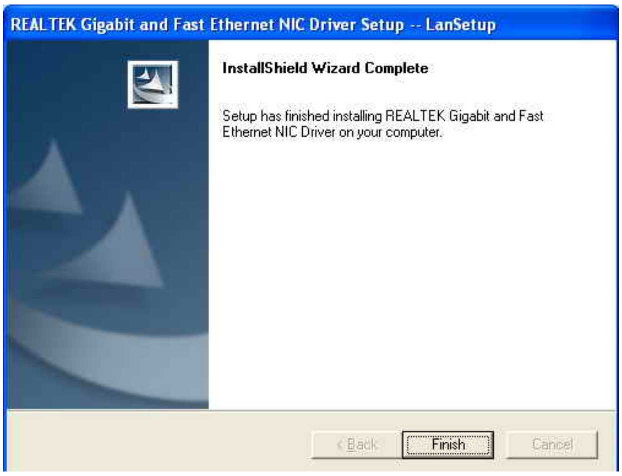
Driver path: <CD>:\Common\LAN_driver\R8139_810x)



a. Click "Setup" on the My computer window.



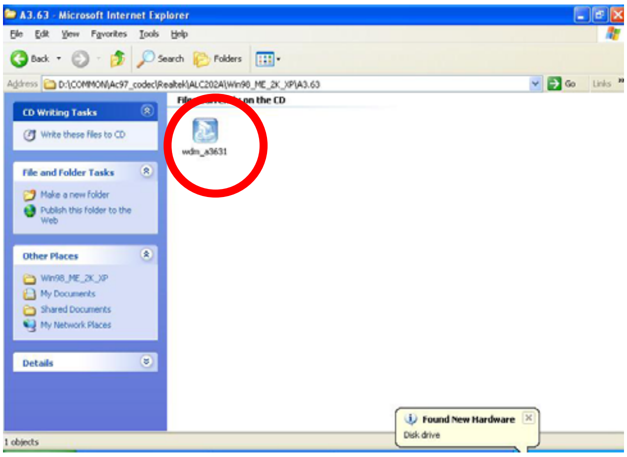
b. Click "Next" button on the Welcome window.



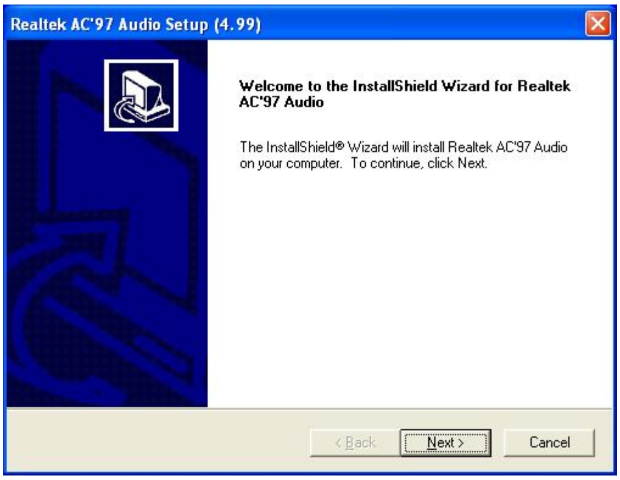
c. Click "Finish" button on the LanSetup window.

5.3.4 Audio Driver Installation

Driver path: <CD>:\Common\Ac97_codec\Realtek\ALC202A)



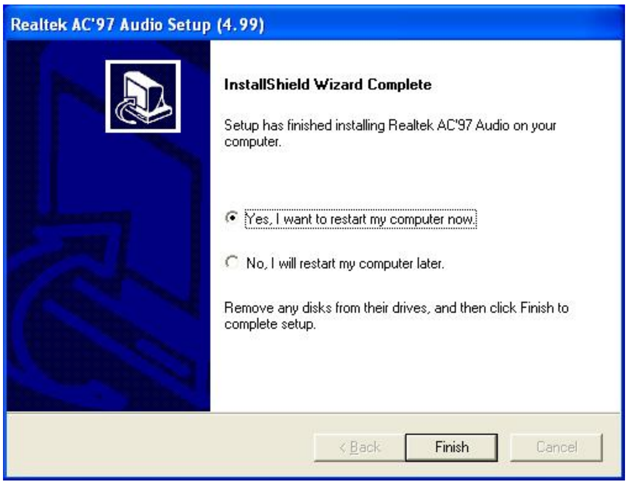
a. Click “wdm_a3631” on the My computer window.



b. Click “Next” button on the Welcome window.



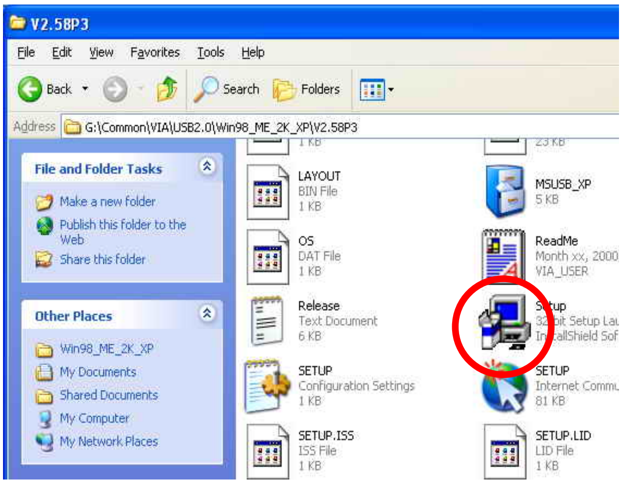
c. Click “Continue Anyway” button on the Hardware Installation window.



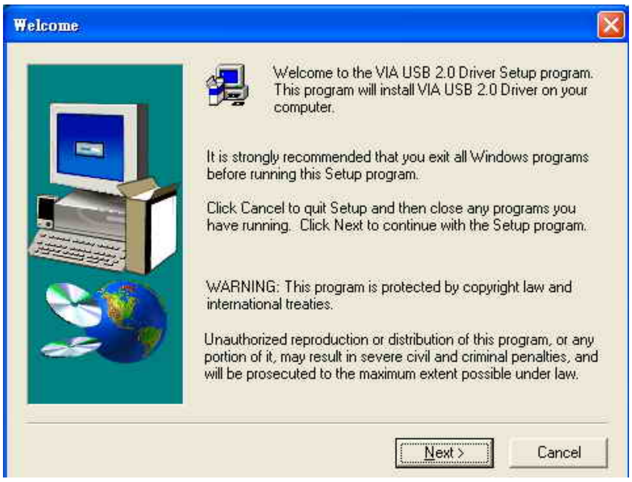
d. Click ”Finish” button to restart system.

5.3.5 USB 2.0 Driver Installation

Driver path: <CD>:\Common\VIA\USB2.0)



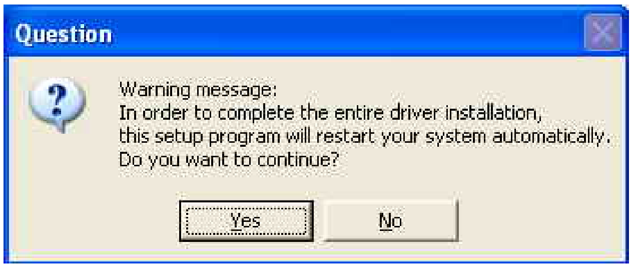
a. Click “Setup” on the My computer window.



b. Click “Next” button on the Welcome window.



c. Click “Next” button on the Setup Component window.

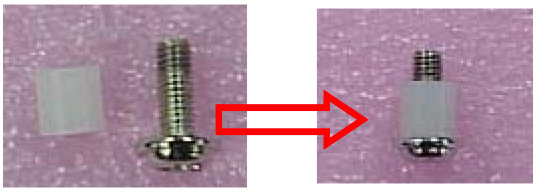


d. Click ”Yes” button to restart system.

6. Installation Cable Cover



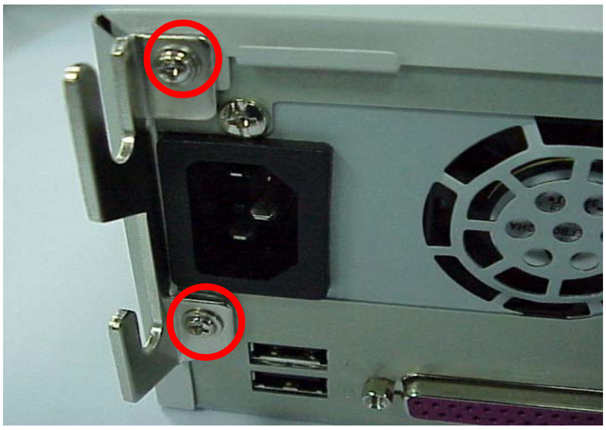
a. Loosen the four screws (4mmx3, 6mmx1 (32UCN)).



b. Insert the screw (8mm) into the plastics.



c. Lock the two screws.





d. Lock the brackets with 6 mm screws.



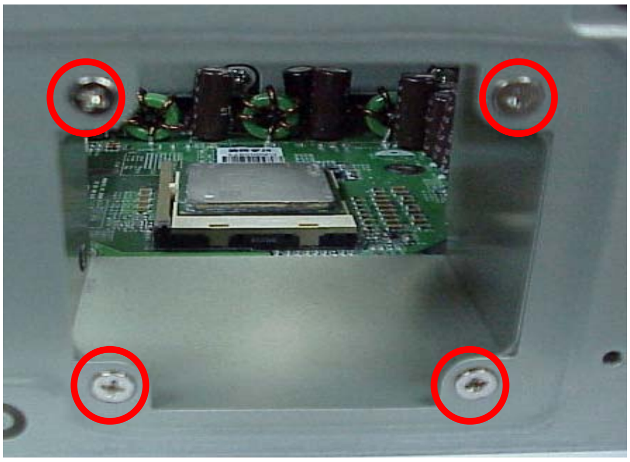
e. Installation the cable cover.



f. Finished.

7. Installation the CPU Cooler

(Note: Only for B79 Mainboard)

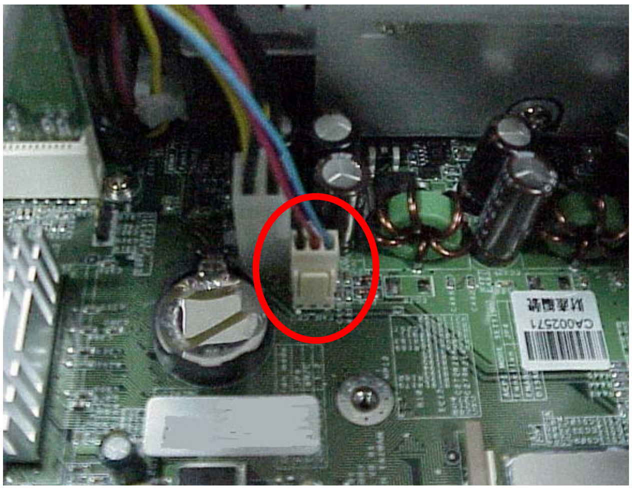




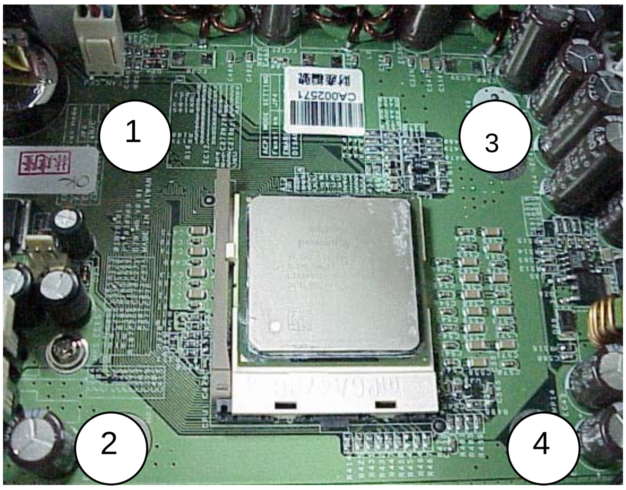
a. Loosen the four screws to release the vent tube.



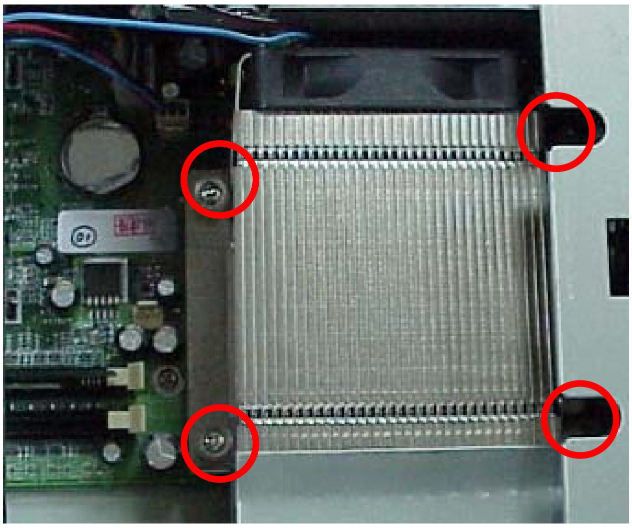
b. Combination the CPU cooler and vent tube.



c. Connection the CPU cooler connector.



d. Lock the four screws on the Mainboard.



8. Installation Cash Drawer

You can install a cash drawer through the Cash Drawer port.

8.1 Cash Drawer Pin Assignment

Pin	Signal
1	GND
2	DOUT bit0
3	DIN bit0
4	12V/24V
5	DOUT bit1
6	GND

Data out address (200h)

Data in address (201h)

8.2 Cash Drawer Controller register

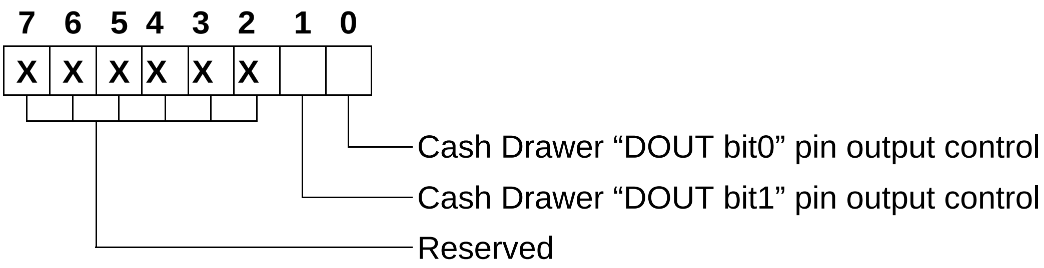
The Cash Drawer Controller use two I/O addresses to control Cash Drawer –Cash Drawer Control Register and Cash Drawer Status Register.

8.2.1 Cash Drawer Control Register

Register Location: 200h

Attribute: Write only

Size: 8bit



Bit 7-2: Reserved

Bit 1: Cash Drawer “DOUT bit1” pin output control.

= 1: Opening the Cash Drawer

= 0: Allow close the Cash Drawer

Bit 0: Cash Drawer “DOUT bit0” pin output control.

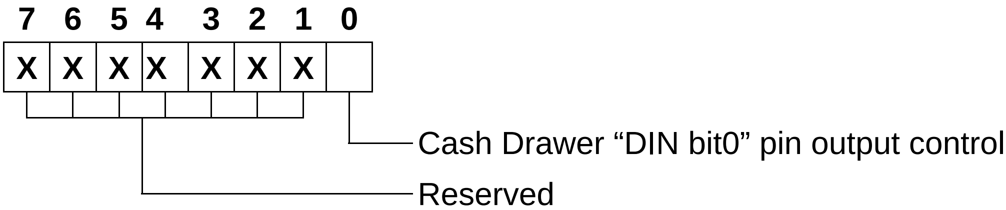
= 1: Opening the Cash Drawer

= 0: Allow close the Cash Drawer

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer. Suggest control the bit1/0 at the same time.

8.2.2 Cash Drawer Status Register

Register Location: 201h
Attribute: Read only
Size: 8bit



Bit 7-1: Reserved
Bit 0: Cash Drawer “DIN bit0” pin input status.
= 1: the Cash Drawer opened or not exist.
= 0: the Cash Drawer closed.

8.3 Cash Drawer control command example

Use Debug.EXE program under DOS or Windows98

Command	Cash Drawer
O 200 01	Opening
O 200 00	Allow to close
➢ Set the I/O address 200h bit0 =1 for opening Cash Drawer by “DOUT bit0” pin control. ➢ Set the I/O address 200h bit0 = 0 for allow close Cash Drawer.	

Command	Cash Drawer
I 201	Check status
➢ The I/O address 201h bit0 =1 mean the Cash Drawer is opened or not exist. ➢ The I/O address 201h bit0 =0 mean the Cash Drawer is closed.	

9. Notices

9.1 Maximum dimension of Interface card

(Maximum dimension of Interface card: 183 mm x 104 mm)

